

- *Human-tiger conflicts in the Indian Sundarbans affect mental well-being of local community members. There is a cultural connect to tigers which further influences interaction with their natural environment.*
- *Tiger-widows exhibit post-traumatic stress disorder and adjustment difficulties in the aftermath of the death of their spouses. Young widows show resilience. Many migrate to neighbouring cities but those that stay behind hope for better livelihood options.*
- *Conservation in the region should be linked with socio-cultural factors feel experts.*

This is the third article in a three-part series based on Mongabay-India's travel to the Indian Sundarbans. Part One (<https://india.mongabay.com/2018/12/05/sundarbans-women-lead-the-way-in-making-dairy-farms-organic/>) is about the highly successful dairy cooperatives in the area. Part Three (<https://india.mongabay.com/2018/12/28/tiger-widows-of-sundarbans-navigating-ecology-beliefs-and-mental-health/>) sheds light on an often-neglected issue: mental health among the tiger widows of Sundarbans.

As the sun beats down on the Indian Sundarbans archipelago in the Bay of Bengal, Gita Mandal recounts her daily ordeal as a fisher, "There are crocodiles in the river and the tiger lurks on land on the other side. Erosion attacks us from the other end."

The island cluster at the confluence of Ganges, Brahmaputra and Meghna rivers in the bay in south Asia, is home to the world's largest mangroves forest and lair of the royal Bengal tiger.

It is in this climate change hotspot that the 55-year-old has spent the last decade reluctantly making the most of what the rivers and tidal creeks have to offer in terms of fish and crabs, after her husband was dragged away by a tiger in the forests.

Reposing her faith in Bonobibi, the guardian deity of the Sundarbans forest, Gita, rows up to a sediment island deposit (*char*) every night, spreads her net and waits in the darkness. She steers away to the safety of her home in Satjelia island every morning with fresh catch. During her vigil, Gita often encounters tigers.

Her neighbour, 45-year-old Subhadra Sanyal continues to experience flashbacks of the day, five years ago, when a tiger took her husband by the neck right in front of her, while they were fishing in a tidal creek.

She has turned her back on the forest for good and picks up work as a domestic help in the islands.



Subhadra Sanyal (L) and Gita Mandal (R) from Satjelia island in Sundarbans lost their husbands to tiger attacks. While Gita continues to depend on the forest for her livelihood through fishing, fear has stopped Subhadra from entering the forest. Photo by Kartik Chandramouli/Mongabay.

In May, when Sumitra Midha's husband fell prey to a big cat as the couple went crab catching in the restricted area of the Sundarbans Tiger Reserve, her belief in Bonobibi was shattered. Having aborted fishing in fear of the tiger, a despondent Sumitra now scrapes a living as an agricultural labourer but fervently hopes for better work options. Hedged in by severe erosion linked to sea level rise, natural disasters and human-animal conflicts, the lives of these "tiger widows" offer a glimpse of a unique relationship between environment, culture and mental health, says U.K.-based researcher Arabinda Chowdhury who has extensively studied the islanders mental health issues through the prism of eco-psychiatry.



Fishing, crab collection and honey collection are some of the primary occupations in Sundarbans which expose them to conflicts with tigers, crocodiles and sharks. Reduction in catch has pushed people to venture into the restricted areas of Sundarbans where the threat is higher. Photo by Kartik Chandramouli/Mongabay.

Trauma from animal attacks affects earning capacity

Home to 4.5 million people and 86 (photographed) tigers, the islands are believed to shelter hundreds of such widows, locally called "Bagh-bidhoba".

Chowdhury who conducted mental health clinics several years ago in Satjelia and adjacent Lahiripur villages (a river away from the tiger reserve buffer) underscored how the ecology of the region affects human lives, particularly women, who are used to agriculture and fishery.

His interactions with local community members threw up cases of social stigma faced by the widows of tiger attack victims as well as cases of post-traumatic stress disorder (PTSD) among them.

Among the PTSD cases, 72 percent were associated with tiger attacks.

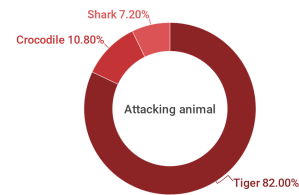
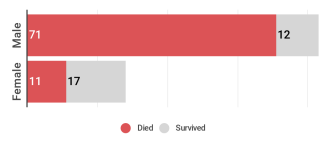
Some of them, like Sumitra and Subhadra, are almost incapacitated because of extreme anxiety and fear, flashbacks of the attack and avoidant behaviour.

"Cases of PTSD associated with crocodile or shark attack, also avoid rivers and are unable to engage in their tiger prawn collection or crab collection activities," Chowdhury said.

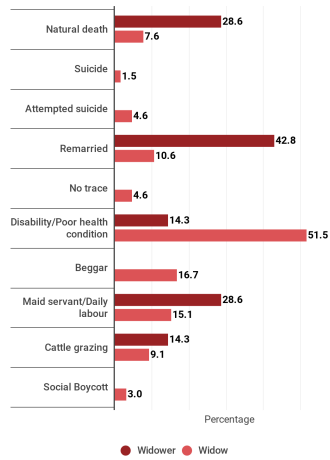
Evidently PTSD has a "strong negative impact" on their earnings.

Number of human-animal conflicts

A total of 3084 households covering a population of 16,999 were surveyed in two villages, Lahiripur and Satjaleia under Gosaba block in Sundarbans.



State of spouses of the deceased



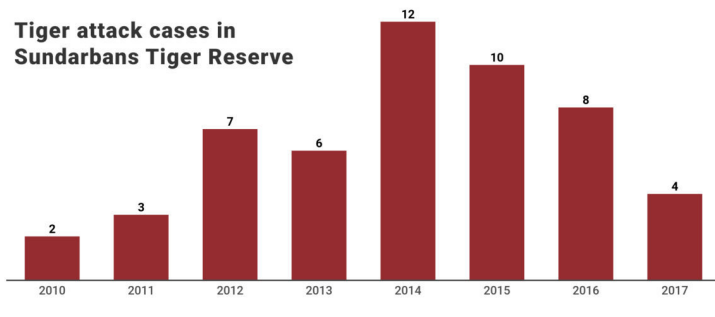
Source: 'Eco-psychiatry and Environmental Conservation: Study from Sundarban Delta, India' (2008), Arabinda N. Chowdhury et al. Chart by Kartik Chandramouli.

This is complicated by the fact that government compensation does not cover the fatalities that occurred in the restricted core of the tiger reserve.

The Sundarbans are administered (<http://sundarbantigerreserve.org/str/>) by the state of West Bengal in India's east coast. Of the 104 islands, 54 have human settlements with a generous sprinkling of shrines dedicated to Bonobibi and Manasa, the goddess of snakes.

Official records accessed by Mongabay-India show 52 human deaths in tiger attacks inside the Sundarban Tiger Reserve from 2010 to 2017.

Tiger attack cases in Sundarbans Tiger Reserve



Source: Sundarbans Tiger Reserve. Chart by Kartik Chandramouli.

In a 2008 study, Chowdhury and co-authors wrote that "during the last 15 years, 111 persons (male 83, female 28) became victims of animal attacks: tiger (82 percent), crocodile (10.8 percent) and shark (7.2 percent) of which 73.9 percent died."

"In 94.5 percent cases the conflict took place in and around the reserve forest during livelihood activities."

Villagers believe the numbers are higher and not recorded because many of these fatalities happen in out-of-bound areas inside the reserve and are not reported to authorities.

"Fencing around the island has taken care of incidents involving tiger entering human settlements and destroying livestock but the tiger takes away people when they go deeper inside the forests," Gita Mandal said.

STR field director Nilanjan Mullick said that management practices are in line to control illegal entry and encroachment and awareness camps have helped in that direction.

"We have joint forest management committees that may include the animal attack widows but more needs to be done in a targetted manner for the widows," Mullick said.

Pradip Chatterjee, Secretary, National Fishworkers' Forum, Kolkata, told Mongabay-India, that the fishing community enters the core area as the yield is not substantial in the buffer. Even in the reserved forest areas outside STR it is extremely difficult to get a decent yield. Artisanal fishers manage to make their ends meet (<https://www.boblme.org/documentRepository/BOBLME-2013-Socioec-03.pdf>) only because of the high price of fish and crabs.

"All of a sudden you have imposed this tiger reserve and the related restrictions without consulting the people. There was enough fish earlier but not much now. The fishers enter the core area as there is no fish outside. Not only their entry is illegal, their deaths are also illegal. They are not reported," Chatterjee said.



*The family of people killed by tigers in the Sundarbans Tiger Reserve don't receive compensation if they entered the area without permits.
Photo by Kartik Chandramouli.*

The years 1770 to 1773 (https://books.google.co.in/books?id=TgFoR7sW5WgC&pg=PA110&lpg=PA110&dq=1770+-+1773+sundarban+CQRmbp&sig=OGWozZOxdR2a1Fj1CckNM8_Pc3A&hl=en&sa=X&ved=2ahUKewiFuZvZ68HfAhXFbSsKHW49AkUQ6AEwCXoECAq%201773%20sundarbans&f=false) saw the first efforts to reclaim forestland in Sundarbans, where people put up their settlements by A report by International Collective in Support of Fish workers-Bay of Bengal Large Marine Ecosystem (BOBLME) (<https://www.boblme.org/documentRepository/BOBLME-2013-Socioec-03.pdf>) notes that forest users, like fishers and honey collectors, have been an integral part of the Sundarbans ecology since pre-colonial times and their rights to fish in the tidal waters of the Sundarbans was officially recognised during the colonial period and thereafter. It is important to note that even the first Management Plan of the STR refers to fishing as a normal "forestry operation", along with the collection of honey and golpata (*Nypa fructicans*), and also mentions the freedom of the fishers to fish in tidal waters.

Sundarban Tiger Reserve was created in 1973, and constituted as a Reserve Forest in 1978. The current core area was established as a National Park (1330 square km) in 1984.

At present the entire Sundarbans area of India is spread over the districts of North 24 Parganas and South 24 Parganas in West Bengal and consists of roughly 4,200 square km of reserve forest and 5,400 square km of non-forested area. In 1989, under UNESCO's Man and Biosphere (MAB) Programme, the Sundarbans Biosphere Reserve (SBR) was declared which includes the STR and the reserve forests outside the STR.

Over the last three decades, expansion of core area (by 28 percent) and notification of a part of the buffer area as a wildlife sanctuary, shrunk the area available for fishing (<https://www.boblme.org/documentRepository/BOBLME-2013-Socioec-03.pdf>) (both land and water) from 892.38 square km to roughly 523 square km.

Even the reserve forest outside the STR, where fishing is permitted only to boats with licenses, fishing areas are gradually becoming unavailable (<https://www.boblme.org/documentRepository/BOBLME-2013-Socioec-03.pdf>).

At a public hearing in the Sundarbans in 2016, over 200 people from the region who are dependent on the forests raised the issue of unbridled tourism and non-implementation of the Forest Rights Act (FRA), 2006.

They complained that tourists are allowed to travel to the core areas with motorised boats whereas the forest dependent people are restricted from doing so. Neither the forest department nor the state government is concerned about the increasing tiger attacks in the region or provisions for compensation for the victims' families.

It was stressed that the method of demarcating areas as (arbitrarily) as buffer/core area or extension of core area is done in an unscientific and illegal fashion without following the provision of FRA.

Chatterjee said although there are challenges to the implementation of the FRA in the Sundarbans, nevertheless the state government should have done it.

"We are now conducting a survey of the tiger widows and creating a network for them. They need to be empowered and they need to help themselves," Chatterjee said.



A Royal Bengal tiger in its habitat in Sundarbans. The tiger, referred to as 'bagh mama', is a crucial part of the region's folklore. Photo (https://commons.wikimedia.org/wiki/File:Tiger_Palm_in_Sundarban.jpg) by Soumyajit Nandy/Wikimedia Commons

Young widows show resilience; many migrate for work

Government-facilitated community-based incentives through panchayat (local self government) and income generation activities initiated by NGOs (livestock/poultry) are not on a large scale and do not reach those who illegally entered the forest, which is a big number, Chowdhury points out.

Sumitra Midha was initially roped in to weaving and stitching activities by an NGO. But she opted out as the pay did not match the hours she had invested.

Gita Mandal, who hails from a string of households in Satjelia often referred to as 'Bidhoba Para' or widows' hamlet, said many young widows have moved out. She chose to stay back to bring up her three young children.

Chowdhury expanded on this from the lens of resilience. Most of the widows (young ones) showed a good resilience after a prolong bereavement and carry forward the upbringing of their children while some migrated to local urban areas or in construction jobs or helper in hotels. "Those widows who are aged and disabled showed rapid deterioration of health and continued living on mercy of others. There were some reports of suicides also."

A tiger attack is regarded as a sign that the goddess is displeased, even enraged with the victim and denies protection from the animals.

To Shyamal Karmakar, an authorised honey collector and tiger attack survivor, this seems a likely explanation for what he had to endure. He was jumped on by a tiger on a honey collection trip and survived because his companions beat the animal away with sticks.

"A claw pierced my leg. I fainted after the attack and had to spend a week in the hospital. Now I work odd jobs under the 100-days work scheme. I am yet to receive a full compensation despite having a honey collector pass," Karmakar told Mongabay-India.

This claimed psychic interconnectedness with the forest has developed over the centuries of human habitation in the region and in time, has evolved into a forest religion where Bonobibi, the protector, stands as the personification of the forest, who offers security to them.



One of the many Bonobibi shrines in Sundarbans. She is considered to be the guardian deity and people worship her before entering the forests. Tiger attacks manifest as signs of her being displeased. Photo by Kartik Chandramouli/Mongabay.

Linking tiger conservation with socio-cultural factors

While this belief system remains intact in many tiger attack survivors and families of victims, Mongabay-India also spoke to those who have shifted away from the 'protector' paradigm.

"We were forced to go crab hunting when paddy crops failed after cyclone Aila. My husband used to worship (Bonobibi). So did I. I don't do anymore. I feel hurt because all these years I prayed to her but she never looked after me so what good will it do to pray now," Sumitra said.

Sumitra asserts she will never let her children venture into the forest.

"We who grew up in the islands know only this (forest and agriculture) and we have never gone outside. We prefer the forest to migrating out. It's only now because of the tiger and crocodile attacks that people are migrating out," she said.

Sumitra, Gita and Subhadra said they were aware of tiger conservation efforts but would not want it at the cost of human wellbeing.

Given the cultural connect to the human-tiger (or human-animal) interactions and conflicts, socio-cultural factors must be brought under the broad umbrella of conservation, feels Chowdhury.

"A lasting eco-cultural advocacy, as a part of community mental health activity, with active community participation would help not only to address the gender-environment issues to mitigate the cultural stigma against tiger-widows, but also enhance the social acceptability of eco-conservation of the Sundarbans's biodiversity," signed off Chowdhury.

Continue reading:

Part One (<https://india.mongabay.com/2018/12/05/sundarbans-women-lead-the-way-in-making-dairy-farms-organic/>): Sundarbans women lead the way in making dairy farms organic

Part Two (<https://india.mongabay.com/2018/12/24/migration-aiding-sundarbans-youth-women-adapt-to-climate-uncertainties/>): Migration aiding Sundarbans youth, women adapt to climate uncertainties

Banner image: Sumitra Midha's husband was killed by a tiger in the Sundarbans Tiger Reserve during crab collection. With her faith in Bonobibi shattered, she quit fishing out of fear. Lack of alternate livelihood options add to the mental stress. Photo by Kartik Chandramouli/Mongabay.

Sahana Ghosh was in the Indian Sundarbans to do a series of stories as part of the Internews' Earth Journalism Network Bay of Bengal Story Grants. Sanjoy Mandal and his team at Sundarban Safari provided valuable assistance during groundwork and navigating across the difficult landscape.

Article published by Sahana



PRINT ([amp/?print](#))

Commenting as **Guest**

Log in Sign up

What do you think?



Sort by **Best** ▾

- G**

GoldPretzel

30 December, 2018

A story told from a different angle.

Reply · · Share
- G**

GoldPin

17 October, 2019

Please donate to the Tiger Widows.

Reply · · Share

Powered by OpenWeb

[Terms](#) | [Privacy](#) | [Feedback](#)

AdChoices

Sponsored

